



Monitoring in the Columbia River Basin:

MAPPING THE WESTERN DREISSENID MONITORING EFFORT

Dreissenid Monitoring

Zebra and Quagga Mussel Monitoring

Protecting the West



Overview

2010

2011

2012

2013

2014

2015

2016

2017

2018

Zebra and Quagga Mussel Occurrence (as of 2017)

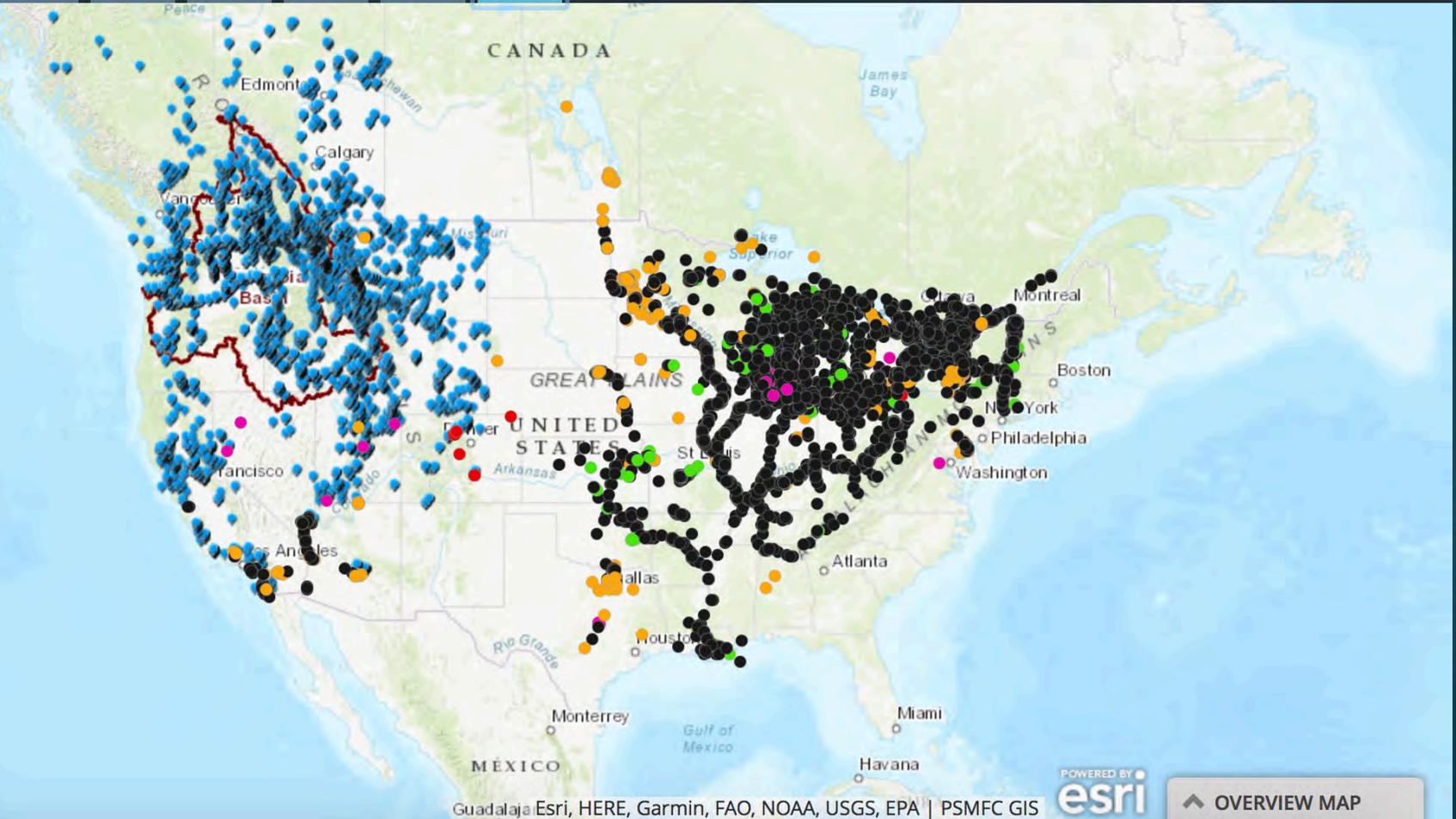
- unknown
- collected
- established
- failed
- eradicated

Quagga_Zebra Mussel Monitoring Sites 2018

Quagga Zebra Mussel Monitoring Sites 2018

Columbia Basin Watershed Boundary

Columbia Basin Boundary



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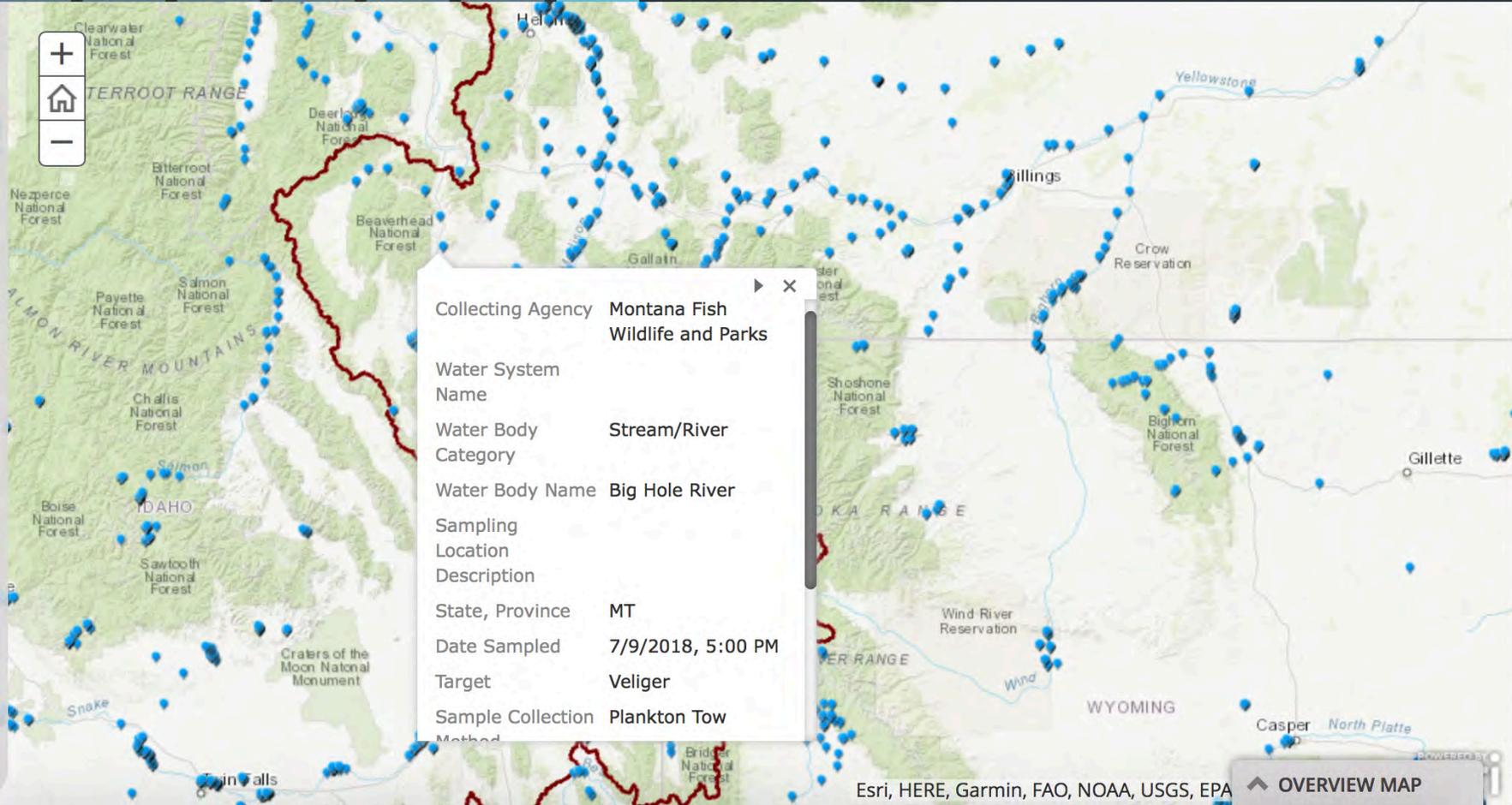
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Quagga_Zebra Mussel Monitoring Sites 2018

Quagga Zebra Mussel Monitoring Sites 2018

Columbia Basin Watershed Boundary

Columbia Basin Boundary



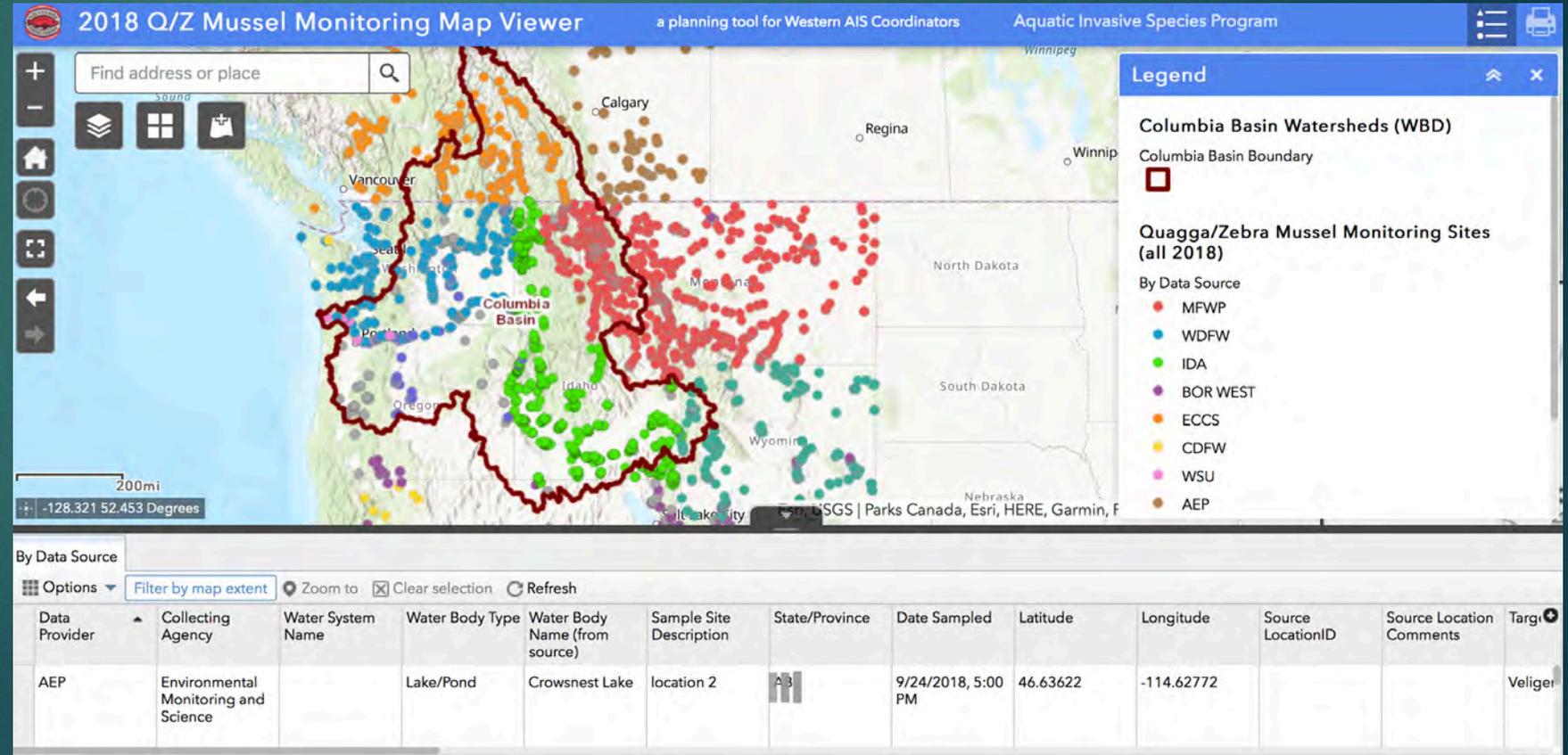
Esri, HERE, Garmin, FAO, NOAA, USGS, EPA

OVERVIEW MAP

2018 Monitoring Data

▶ <https://tinyurl.com/yyyk4d7r>

▶ Data made available as a planning tool

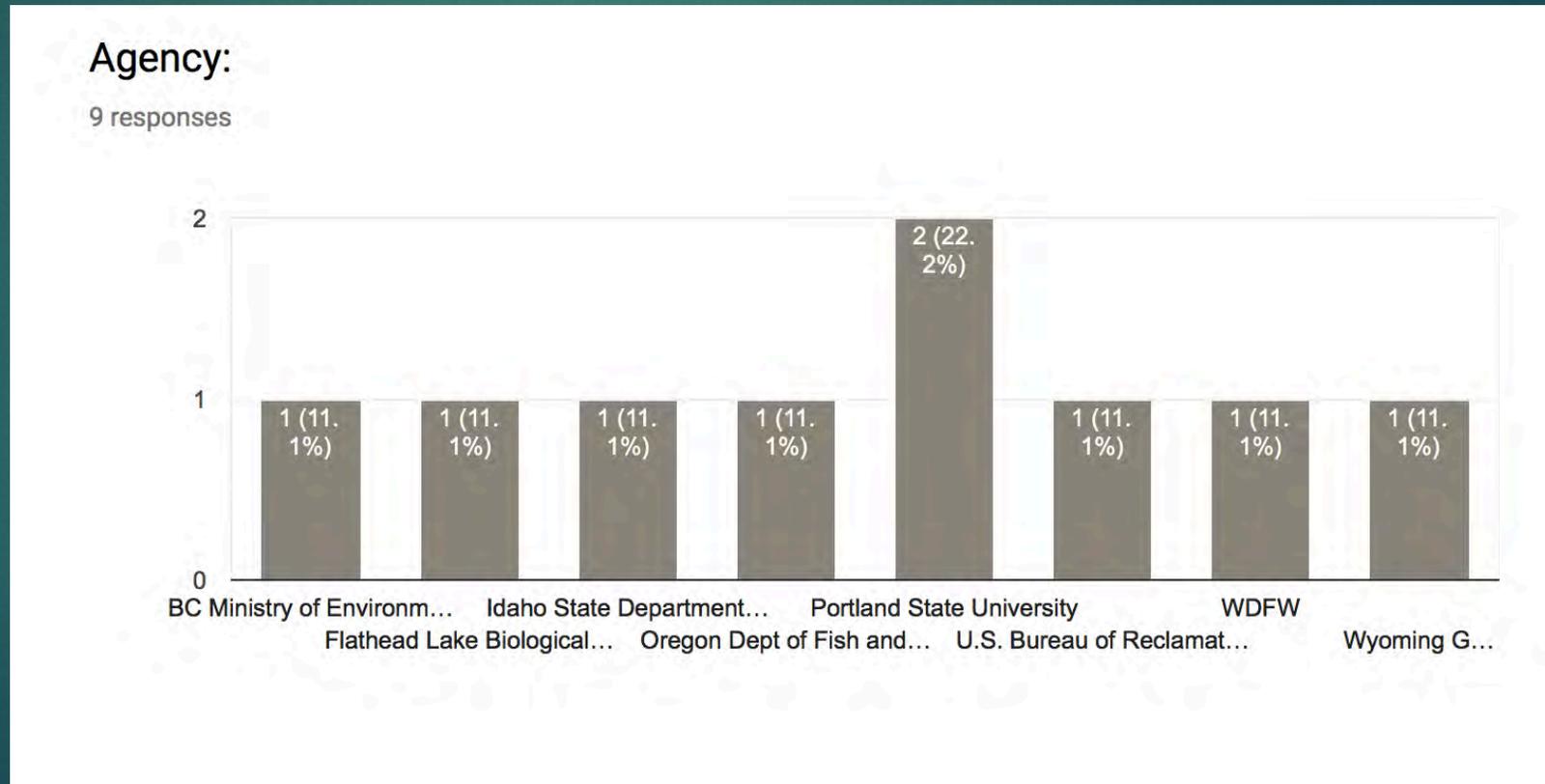


CRB Dreissenid Monitoring Data Survey

- ▶ What is the ideal timing of data request/submission?
- ▶ Do states need this information for planning purposes? If so, when?
- ▶ Do data requests/formats match up with data collection?
- ▶ What are the biggest barriers and bottlenecks to data submission?
- ▶ What can we do better?

CRB Dreissenid Monitoring Data Survey cont.

- ▶ Respondents: 9 (<50%)



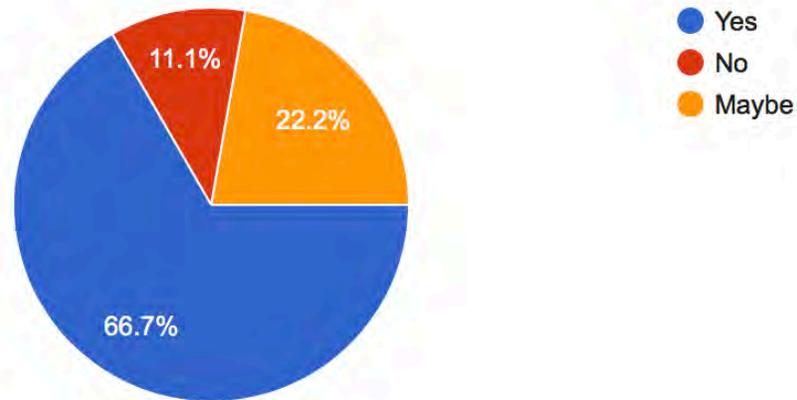
CRB Dreissenid Monitoring Data Survey: TIMING

- ▶ When do you/your agency begin planning for the upcoming field season?
 - ▶ November → April (~February)
- ▶ When does your field/sampling season usually end?
 - ▶ September → November (~October)
- ▶ When do you process, compile, and/or perform QA/QC on your sampling data?
 - ▶ Realtime → December
- ▶ Would it be useful to you/your staff if we make our ZQ monitoring spreadsheet available prior to the end of your sampling season/data compilation?
 - ▶ 62% Yes, 38% Maybe

CRB Dreissenid Monitoring Data Survey: PLANNING

Would it be useful to you to have the CRB ZQ Monitoring data published in map form prior to your field season planning?

9 responses



CRB Dreissenid Monitoring Data Survey: PLANNING

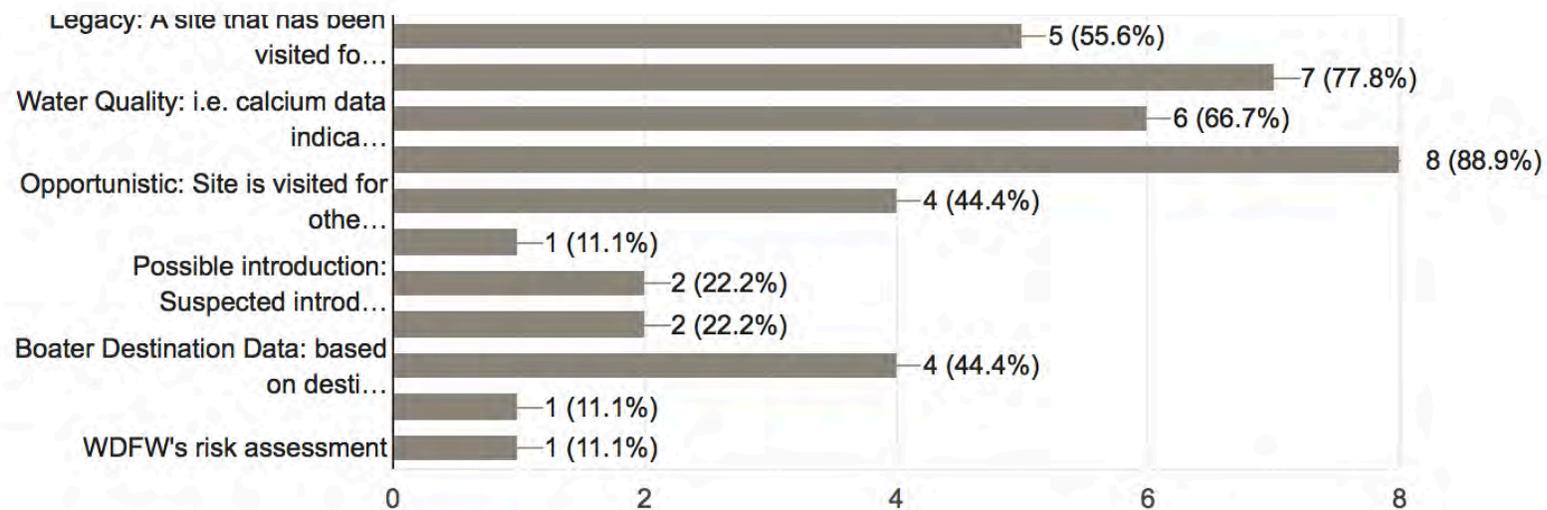
What criteria do you use to select a water body for early detection monitoring?

- Legacy: A site that has been visited for multiple years as part of this monitoring effort
- Risk Assessment (Study): Water body indicated as high risk based on published work (i.e. Wells et al. 2010)
- Water Quality: i.e. calcium data indicate risk of establishment
- Recreational Use: Known high use water body
- Opportunistic: Site is visited for other studies, water quality, etc.
- Volunteer Availability: site has a designated volunteer, Lake Watch, or other program that includes AIS monitoring d...
- Possible introduction: Suspected introduction/establishment of Dreissenids
- Avoid Duplication of Effort: increased coverage based on distribution of other ZQ monitoring in your region/area by ...
- Boater Destination Data: based on destination waterbody data from WID stations, inspections, etc.
- Other...

CRB Dreissenid Monitoring Data Survey: PLANNING

What criteria do you use to select a water body for early detection monitoring? (please choose all that apply)

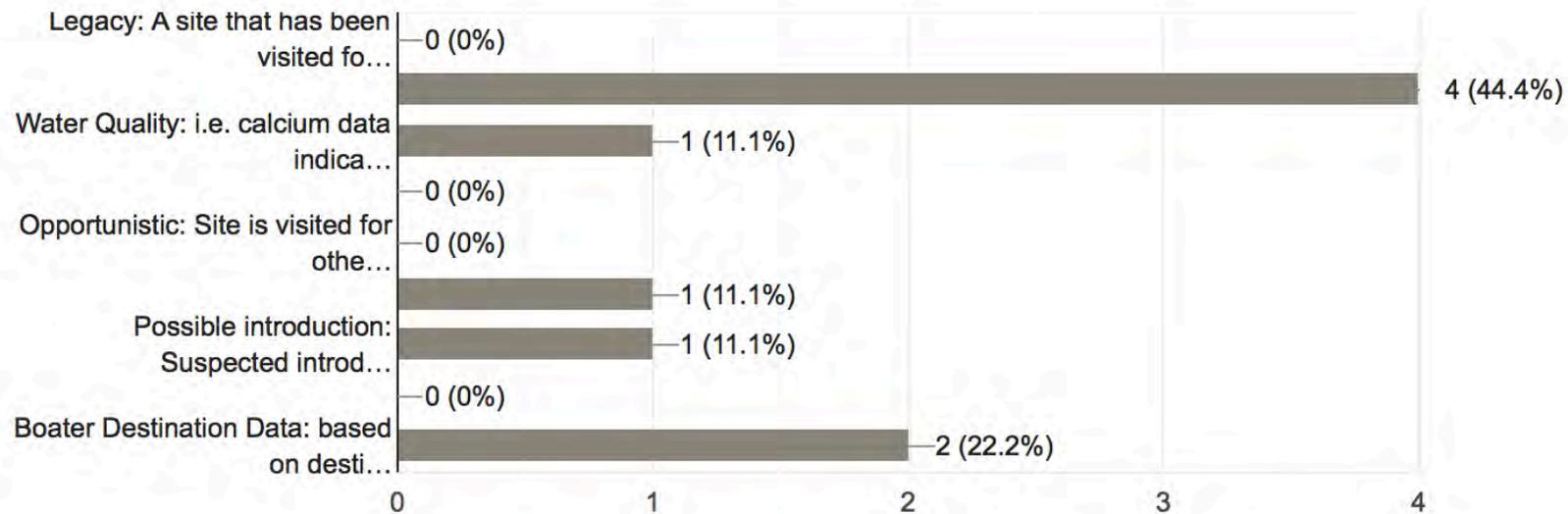
9 responses



CRB Dreissenid Monitoring Data Survey: PLANNING

Which of these criteria is the MOST important for your site selection
(choose only one)

9 responses



CRB Dreissenid Monitoring Data Survey: BARRIERS

Barriers and bottlenecks to reporting monitoring data

Please help us figure out what the biggest issues are that make submitting/reporting dreissenid monitoring data difficult for your agency or entity. Please rank the following in order of importance: 1 being the most important, 5 the least.

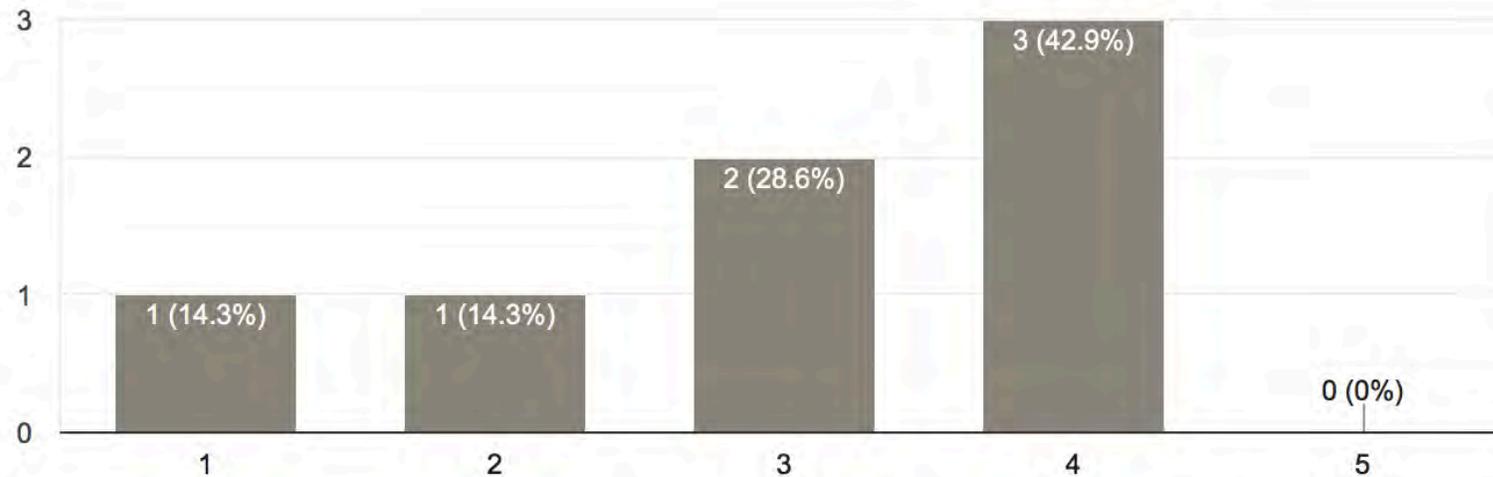
1 2 3 4 5

Most Important Least Important

CRB Dreissenid Monitoring Data Survey: BARRIERS

Formatting data to meet PSMFC categories/requested measurement types is cumbersome.

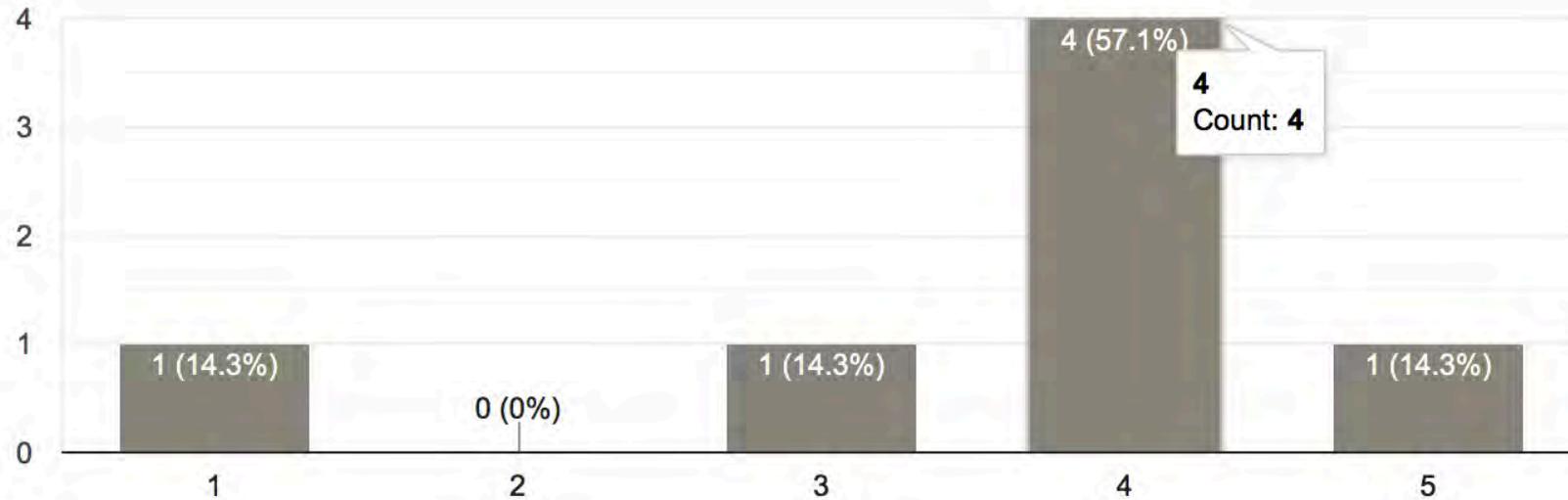
7 responses



CRB Dreissenid Monitoring Data Survey: BARRIERS

Reporting in the PSMFC requested format takes too much staff time.

7 responses



CRB Dreissenid Monitoring Data Survey: WHAT CAN WE DO BETTER?

- ▶ Hope to get additional responses.
- ▶ May consider additional (shorter) survey of participants with spatial data sets.
- ▶ Use results to:
 - ▶ Tweak the timing of:
 - ▶ Spreadsheet distribution
 - ▶ Data call
 - ▶ Initial mapping
 - ▶ Tweak our spreadsheet categories
 - ▶ Evaluate potential other options for reducing burden, addressing QA/QC, other data